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EXAMINER

GOODCHILD, WILLIAM J

ART UNIT	PAPER NUMBER
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2145

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/663,161

Applicant(s)

STAMLER ET AL.

Examiner

William J. Goodchild

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06/04/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 26-31 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Baskey et al., (hereinafter Baskey), (US Patent No. 6,148,410) .

In reference to claims 1, 26 and 33, Baskey et al. teaches a method and system comprising:

receiving user input specifying an operation to perform on the cluster as a whole, (column 2, lines 46-47 and column 6, lines 51-56 and 59-60, A cluster is a group of network elements that work together as one. Two or more routers as defined by Baskey are designed to work together as one, in that they maintain the same routing tables and connections.); and

automatically performing the specified operation on one or more of the active routers in the cluster by transforming the specified operation into one or more device-specific operations for each of the one or more active routers, (column 2, lines 46-47

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and column 6, lines 51-60, Baskey shows in his example one set of routers, but states that the number of sets can be increased if desired).

In reference to claims 2 and 27, Baskey et al. teaches the method / system of claims 1 and 26 wherein:

the receiving step comprises receiving user input specifying a configuration command for the cluster, (column 3, lines 64-66 and column 6, lines 51-56); and

wherein the performing step comprises automatically communicating the configuration command to each of the active routers in the plurality of active routers, (column 2, lines 46-49 and column 6, lines 51-56).

In reference to claims 3 and 28, Baskey et al. teaches the method / system of claims 2 and 27 wherein:

subscribing a management process to an event bus, (a bus is a subsystem to transfer data between two network components, a bus can logically connect several peripherals over the same set of wires. column 2, line 67 and column 3, lines 1-3, column 1, lines 7-12, show the connections between the routers and as Baskey states additional routers can be added as needed);

subscribing each of the active routers to the event bus, (column 2, line 67 and column 3, lines 1-3, Baskey states that additional routers can be added in column 1, lines 7-12); and

publishing the configuration command in an event on the event bus, (data (or events) is transferred via the subsystem connecting the network elements, column 2, line 67, column 3, lines 1-3 and column 6, lines 51-56, column 1, lines 7-12).

In reference to claims 4 and 29, Baskey et al. teaches the method / system of claims 3 and 28 wherein:

receiving the event, (column 3, lines 64-67 and column 4, lines 37-39);

extracting the configuration command from the event, (column 3, lines 64-67, column 4, lines 1-5, lines 37-39, shows that the configuration command from either the operator event or detected failure event); and

presenting the configuration command to a native console, (column 3, lines 53-57 and column 4, lines 1-5 and 37-39, MM240 shows a Monitoring Manager which is sent the events from the KAM 'Keep Alive Manager').

In reference to claims 5 and 30, Baskey et al. teaches the method / system of claims 2 and 27, wherein:

the configuration command is a configuration load command, (column 3, lines 64-67 and column 4, lines 1-5, the configuration load command is changing from an active state to a stand-by state or from stand-by state to an active state).

In reference to claims 6 and 31, Baskey et al. teaches the method / system of claims 2 and 27 wherein:

the configuration command is a configuration execution command, (column 3, lines 64-67 and column 4, lines 1-5).

3. Claims 8-11, 17, 19-22 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by HP OpenView, (hereinafter HP), (Document "Using Network Node Manager", HP OpenView Edition 1, J1136-90002, April 1997).

In reference to claim 8, HP teaches a method and system comprising:

receiving first user input requesting an operational overview of the cluster, (page 34, lines 13-14, explain the hierarchically organization of the submaps, page 41-43 and tables 2-1 and 2-2, explain how to start the HP OpenView GUI and page 47, last bullet, 'Opening a child submap' explains how to drill down to the user created submaps of switches and routers); and

generating and displaying an operational overview of the cluster, wherein the operational overview comprises a status indicator, connection information, failed device information, and a first access icon for accessing information about the stack, (page 34, lines 13-14, page s 48, 51, 66, 78-79, Fig. 2-2 and Table 3-1, HP Network Node Manager discusses creating a network monitoring overview and from the overview, creating drill down levels of network elements. The drill down can go as many levels as your network may require. Each top level can be a switch with a set of routers to drill down to, showing the network connections within the GUI.).

In reference to claim 9, HP teaches a method and system of claim 8 further comprising the steps of:

receiving second user input that selects the first access icon, (page 34, lines 13-14, explain the hierarchically organization of the submaps, page 41-43 and tables 2-1 and 2-2, explain how to start the HP OpenView GUI and page 47, last bullet, 'Opening a child submap' explains how to drill down to the user created submaps of switches and routers);

generating and displaying a device operational overview for devices in the cluster, wherein the device operational overview comprises, for each router in the stack of the cluster, a device status indicator, device connection information, failed connection information, and a second access icon for accessing information about connections of the switch devices and the stack, (page 34, lines 13-14, page s 48, 51, 66, 78-79, Fig. 2-2 and Table 3-1).

In reference to claim 10, HP teaches a method and system of claim 8 further comprising the steps of:

receiving third user input that selects the second access icon, (page 34, lines 13-14, explain the hierarchically organization of the submaps, page 41-43 and tables 2-1 and 2-2, explain how to start the HP OpenView GUI and page 47, last bullet, 'Opening a child submap' explains how to drill down to the user created submaps of switches and routers);

generating and displaying a connection operational overview for connections of the cluster, wherein the connection operational overview comprises, for each connection of the stack, a connection status indicator and one or more values of attributes associated with the connection, (page 34, lines 13-14, page s 48, 51, 66, 78-79, Fig. 2-2 and Table 3-1).

In reference to claim 11, HP teaches a method and system comprising:

receiving first user input in a user interface (UI) that identifies a first switch device and a second switch device for a network device cluster, (page 34, lines 13-14, explain the hierarchically organization of the submaps, page 41-44 and tables 2-1 and 2-2, explain how to start the HP OpenView GUI and page 47, last bullet, 'Opening a child submap' explains how to drill down to the user created submaps of network elements (switches and routers));

receiving second user input in the UI that identifies a plurality of network elements for a router stack of the cluster, (page 34, lines 13-14, explain the hierarchically organization of the submaps, page 41-44 and tables 2-1 and 2-2, explain how to start the HP OpenView GUI and page 47, last bullet, 'Opening a child submap' explains how to drill down to the user created submaps of network elements (switches and routers), page 52 and page 78-79);

receiving third user input in the UI that defines at least one first connection of the first switch device in association with at least one network element in the stack, and at least one second connection of the second switch device in association with at least

one network element in the stack, (page 34, lines 13-14, page 52, page 78-79, Fig. 2-3 and tables 3-1 and 3-2); and

associating the first, second, and third user input in a cluster object that programmatically represents the cluster, (page 34, lines 13-14, page 52, page 78-79, Fig. 2-3 and tables 3-1 and 3-2).

In reference to claim 17, HP teaches a method as recited in Claim 11, wherein the second user input comprises information identifying one or more network elements from the plurality of network elements as back-up network elements, (page 34, lines 13-14 and pages 48, 78-79).

In reference to claim 19, HP teaches a method as recited in Claim 11, further comprising the step of receiving a fourth user input in the UI that modifies information received in the second and third user inputs, (page 34, lines 13-14, page 48 and pages 78-79).

In reference to claim 20, HP teaches a method as recited in Claim 11, further comprising the step of receiving a fourth user input in the UI that identifies at least one network element as removed from the plurality of network elements, (page 34, lines 13-14, page 48 and pages 78-79).

In reference to claim 21, HP teaches a method as recited in Claim 11, further comprising the step of receiving a fourth user input in the UI that disassociates at least one switch device from the plurality of switch devices with at least one network elements from the plurality of network elements, (page 34, lines 13-14, page 48 and pages 78-79).

In reference to claim 22, HP teaches a method as recited in Claim 11, wherein the first, second, and third user inputs define a logical stack object, wherein the logical stack object is identified by a stack name and represents a logical grouping of at least two switch devices and at least one network element, (page 34, lines 13-14, page 48 and pages 78-79).

In reference to claim 24, HP teaches a user interface (UI) located at a user device for use in providing a single console control point for a network device cluster, comprising:

- an input mechanism for receiving user input, wherein the user input includes:

- a first user input that identifies a plurality of switch devices in a logical stack object that represents the network device cluster, (page 34, lines 13-14, pages 42-44, 52, 78-79 and figure 2-3);

- a second user input that identifies a plurality of network elements in the network device cluster, (page 34, lines 13-14, pages 42-44, 52, 78-79 and figure 2-3); and

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a third user input that associates at least one switch device from the plurality of switch devices with at least one network element from the plurality of network elements, (page 34, lines 13-14, pages 42-44, 52, 78-79 and figure 2-3); and

an execute mechanism for causing re-provisioning of real network elements that are represented by the logical stack object, (page 34, lines 13-14, pages 42-44, 52, 78-79 and figure 2-3).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-7 and 26-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Mittal et al., (hereinafter Mittal), (US Patent No. 7,076,645).

In reference to claims 1, 26, 33, Mittal et al. teaches a method and system comprising:

receiving user input specifying an operation to perform on the cluster as a whole, (column 2, lines 41-46 and Figure 1, the term cluster refers to a group of nodes configured to act as a single node, when sending a reboot command as suggested by Mittal, you can reboot a portion of your cluster through scripts by keeping at least one of

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the cluster members active, after the other members reboot and making the rebooted members active); and

automatically performing the specified operation on one or more of the active routers in the cluster by transforming the specified operation into one or more device-specific operations for each of the one or more active routers, (column 2, lines 41-46 and Figure 1, using the reboot script, the members of the cluster are each given the signal to reboot, or to remain active and reboot when a proper response is received by the rebooted members as they become active again).

In reference to claims 2 and 27, Mittal et al. teaches the method / system of claims 1 and 26 wherein:

the receiving step comprises receiving user input specifying a configuration command for the cluster, (column 2, lines 41-46 and Figure 1); and

wherein the performing step comprises automatically communicating the configuration command to each of the active routers in the plurality of active routers, (column 2, lines 41-46 and Figure 1).

In reference to claims 3 and 28, Mittal et al. teaches the method / system of claims 2 and 27 wherein:

subscribing a management process to an event bus, (a bus is a subsystem to transfer data between two network components, a bus can logically connect several peripherals over the same set of wires. column 4, lines 8-15 and 26-28, Mittal shows

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Remote Management Broker (RMB) item 350 used for distributing information between the nodes within the cluster);

subscribing each of the active routers to the event bus, (column 4, lines 8-15 and 26-28); and

publishing the configuration command in an event on the event bus, (column 4, lines 8-15 and 26-28).

In reference to claims 4 and 29, Mittal et al. teaches the method / system of claims 3 and 27 wherein:

receiving the event, (column 4, lines 8-15 and 26-28);

extracting the configuration command from the event, (column 4, lines 8-15 and 26-28); and

presenting the configuration command to a native console, (column 4, lines 8-15 and 26-28).

In reference to claims 5 and 30, Mittal et al. teaches the method / system of claims 2 and 27, wherein:

the configuration command is a configuration load command, (column 4, lines 48-50).

In reference to claims 6 and 31, Mittal et al. teaches the method / system of claims 2 and 27 wherein:

the configuration command is a configuration execution command, (column 2, lines 41-46).

In reference to claims 7, 32 and 34, Mittal et al. teaches the method / system of claims 2, 27 and 33 wherein:

the user input is received in a graphical user interface, and further comprising the step of displaying an execution log for the configuration command within the same graphical user interface in which the user input is received, (column 4, lines 52-53 and 66-67).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 12-13, 15 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over HP OpenView, (hereinafter HP), (Document "Using Network Node Manager", HP OpenView Edition 1, J1136-90002, April 1997) in view of Kekic et al., (hereinafter Kekic), (US Patent No. 6,788,315).

In reference to claim 12, HP teaches the method as disclosed in claim 11, wherein claim 12 further comprises:

receiving information specifying that a network element in the cluster has failed, (HP, pages 66 and 78-80);

HP explicitly teaches the limitations as disclosed above except for the limitations of:

selecting a substitute network element from among one or more available network elements from the router stack;

receiving connection configuration information from the identified network element; and

based on the connection configuration information, re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element.

The general concept of selecting a substitute network element, is well known within the art as illustrated by Kekic which discloses the use of selecting network elements, (Kekic, column 6, lines 6-27 and 34-37), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of selecting a substitute network element as taught by Kekic in order to make use of the well known concept of selecting a substitute network element as stated in claim 12.

The general concept of receiving connection configuration information from the identified network element, is well known within the art as illustrated by Kekic which

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discloses the use of receiving connection configuration information from the identified network element, (Kekic, column 6, lines 6-27 and 34-37), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of receiving connection configuration information from the identified network element as taught by Kekic in order to make use of the well known concept of receiving connection configuration information from the identified network element as stated in claim 12.

The general concept of re-configuring the substitute network element, is well known within the art as illustrated by Kekic which discloses the use of re-configuring the substitute network element, (Kekic, column 6, lines 6-27 and 34-37), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP as taught by Kekic in order to make use of the well known concept of re-configuring the substitute network element as stated in claim 12.

In reference to claim 13, HP teaches the method as disclosed in claim 12.

HP explicitly teaches the limitations as disclosed above except for the limitations of:

creating one or more sets of commands to configure the one or more switch devices; and

publishing a configuration load event that includes the commands and that targets only the one or more switch devices associated with the identified and substitute network elements.

The general concept of creating one or more sets of commands to configure the one or more switch devices, is well known within the art as illustrated by Kekic which discloses the use of creating one or more sets of commands to configure the one or more switch devices, (Kekic, column 6, lines 45-47, 65-67 and column 7, lines 1-6 and 12-19), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of creating one or more sets of commands to configure the one or more switch devices as taught by Kekic in order to make use of the well known concept of creating one or more sets of commands to configure the one or more switch devices, as stated in claim 13.

The general concept of publishing a configuration load event that includes the commands and that targets only the one or more switch devices associated with the identified and substitute network elements, is well known within the art as illustrated by Kekic which discloses the use of publishing a configuration load event that includes the commands and that targets only the one or more switch devices associated with the identified and substitute network elements, (Kekic, column 6, lines 37-41), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of publishing a configuration load event that includes

the commands and that targets only the one or more switch devices associated with the identified and substitute network elements as taught by Kekic in order to make use of the well known concept of publishing a configuration load event that includes the commands and that targets only the one or more switch devices associated with the identified and substitute network elements, as stated in claim 13.

In reference to claim 15, HP teaches the method as disclosed in claim 11.
HP explicitly teaches the limitations as disclosed above except for the limitations of:

the third user input includes information defining a set of commands used to reconfigure at least one switch device from the plurality of switch devices.

The general concept of user input includes information defining a set of commands used to reconfigure at least one switch device, is well known within the art as illustrated by Kekic which discloses the use of user input includes information defining a set of commands used to reconfigure at least one switch device, (Kekic, column 6, lines 37-41), and falls within the realm of common knowledge as obvious design optimization. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of user input includes information defining a set of commands used to reconfigure at least one switch device as taught by Kekic in order to make use of the well known concept of user input includes information defining a set of commands used to reconfigure at least one switch device, as stated in claim 15.

In reference to claim 23, HP teaches the method as disclosed in claim 22.

HP explicitly teaches the limitations as disclosed above except for the limitation of: the step of receiving a fourth user input in the UI that requests sending a command to all switch devices and all network elements represented by the logical stack object. The general concept of receiving user input in the UI that requests sending a command to all switch devices and all network elements represented by the logical stack object, is well known within the art as illustrated by Kekic which discloses the use of receiving user input in the UI that requests sending a command to all switch devices and all network elements represented by the logical stack object, (Kekic, column 6, lines 37-41), and falls within the realm of common knowledge as obvious design optimization. It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of receiving user input in the UI that requests sending a command to all switch devices and all network elements represented by the logical stack object as taught by Kekic in order to make use of the well known concept of receiving user input in the UI that requests sending a command to all switch devices and all network elements represented by the logical stack object, as stated in claim 23.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over HP OpenView, (hereinafter HP), (Document "Using Network Node Manager", HP OpenView Edition 1, J1136-90002, April 1997) and of Kekic et al., (hereinafter Kekic), (US Patent No. 6,788,315) as applied to claim 13 above, and further in view of Baskey et al., (hereinafter Baskey), (US Patent No. 6,148,410).

In reference to claim 14, HP and Kekic teach the method as disclosed in claim 13, wherein claim 14 further comprises: the step of re-configuring the substitute network element and the one or more switch devices associated with the identified network element further comprises the steps of:

at each of the one or more switch devices, publishing a configuration complete event to acknowledge completing the processing of the particular set of commands, (Kekic, column 86, lines 33-38 and 58-67).

HP and Kekic explicitly teach the limitations as disclosed above except for the limitations of:

in response to the configuration load event, each of the one or more switch devices connecting to the cluster manager and receiving a particular set of commands, (Baskey, Abstract, lines 4-8);

at each of the one or more switch devices, processing the particular set of commands, wherein processing includes causing the one or more switch devices to change the one or more connections from the identified network element to the substitute network element, (Baskey, Abstract, lines 4-8).

The general concept of each of the one or more switch devices connecting to the cluster manager and receiving a particular set of commands, is well known within the art as illustrated by Baskey which discloses the use of each of the one or more switch devices connecting to the cluster manager and receiving a particular set of commands, (Baskey, Abstract, lines 4-8), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of each of the one or more switch devices connecting to the cluster manager and receiving a particular set of commands as taught by Baskey in order to make use of the well known concept of each of the one or more switch devices connecting to the cluster manager and receiving a particular set of commands, as stated in claim 14.

The general concept of at each of the one or more switch devices, processing the particular set of commands, wherein processing includes causing the one or more switch devices to change the one or more connections from the identified network element to the substitute network element, is well known within the art as illustrated by Baskey which discloses the use of at each of the one or more switch devices, processing the particular set of commands, wherein processing includes causing the one or more switch devices to change the one or more connections from the identified network element to the substitute network element, (Baskey, Abstract, lines 4-8), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of at each of the one or more switch devices, processing the particular set of commands, wherein processing includes causing the one or more switch devices to change the one or more connections from the identified network element to the substitute network element as taught by Baskey in order to make use of the well known concept of at each of the one or more switch devices, processing the particular set of commands, wherein processing includes causing the

one or more switch devices to change the one or more connections from the identified network element to the substitute network element, as stated in claim 14.

9. Claims 16, 18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over HP OpenView, (hereinafter HP), (Document "Using Network Node Manager", HP OpenView Edition 1, J1136-90002, April 1997) in view of Baskey et al., (hereinafter Baskey), (US Patent No. 6,148,410).

In reference to claim 16, Ref HP teaches the method as disclosed in claim 11, wherein claim 16 further comprises: the first, second and third user inputs are stored persistently at a cluster manager, (HP, page 34, lines 13-14, pages 48, 78-79). HP explicitly teaches the limitations as disclosed above except for the limitation of: wherein each of the plurality of switch devices and the plurality of network elements persistently stores startup configuration information, but does not store the first, second and third user inputs.

The general concept of each of the plurality of switch devices and the plurality of network elements persistently stores startup configuration information, but does not store the first, second and third user inputs, is well known within the art as illustrated by Baskey which discloses the use of each of the plurality of switch devices and the plurality of network elements persistently stores startup configuration information, but does not store the first, second and third user inputs, (Baskey, column 2, lines 8-11 and column 3, 43-48), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of each of the plurality of switch devices and the plurality of network elements persistently stores startup configuration information, but does not store the first, second and third user inputs as taught by Baskey in order to make use of the well known concept of each of the plurality of switch devices and the plurality of network elements persistently stores startup configuration information, but does not store the first, second and third user inputs, as stated in claim 16.

In reference to claim 18, HP teaches the method as disclosed in claim 11. HP explicitly teaches the limitations as disclosed above except for the limitations of:

the second user input comprises information identifying one or more network elements from the plurality of network elements as stand-by network elements.

The general concept of user input comprises information identifying one or more network elements from the plurality of network elements as stand-by network elements, is well known within the art as illustrated by Baskey which discloses the use of user input comprises information identifying one or more network elements from the plurality of network elements as stand-by network elements, (Baskey, column 2, lines 58-62), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of user input comprises information identifying one or more network elements from the plurality of network elements as stand-by network elements as taught by Baskey in order to make use of the well known concept of user

input comprises information identifying one or more network elements from the plurality of network elements as stand-by network elements, as stated in claim 18.

In reference to claim 25, HP teaches the system as disclosed in claim 24.
HP explicitly teaches the limitations as disclosed above except for the limitations of:

the execute mechanism comprises instructions which, when executed by a processor, cause the processor to perform the steps of:

identifying a network element that has failed;
selecting a substitute network element from among one or more available network elements from the plurality of network elements;
receiving connection configuration information from the identified network element; and

based on the connection configuration information, re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element.

The general concept of identifying a network element that has failed, is well known within the art as illustrated by Baskey which discloses the use of identifying a network element that has failed, (Baskey, column 3, lines 53-57), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of identifying a network element that has failed as taught by Baskey in order to make use of the well known concept of identifying a network element that has failed, as stated in claim 25.

The general concept of selecting a substitute network element, is well known within the art as illustrated by Baskey which discloses the use of selecting a substitute network element, (Baskey, column 3, lines 62-67), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of selecting a substitute network element as taught by Baskey in order to make use of the well known concept of selecting a substitute network element, as stated in claim 25.

The general concept of receiving connection configuration information from the identified network element, is well known within the art as illustrated by Baskey which discloses the use of receiving connection configuration information from the identified network element, (Baskey, column 3, lines 53-57), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of receiving connection configuration information from the identified network element as taught by Baskey in order to make use of the well known concept of receiving connection configuration information from the identified network element, as stated in claim 25.

The general concept of re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element, is well known within the art as illustrated by Baskey which discloses the use of re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element, (Baskey, column 4, lines 9-33), and falls within the realm of common knowledge as obvious design optimization.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify HP to include the use of re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element as taught by Baskey in order to make use of the well known concept of re-configuring the substitute network element and the one or more switch devices associated with the identified network element, wherein the re-configuring causes the one or more switch devices to change one or more connections from the identified network element to the substitute network element, as stated in claim 25.

Response to Arguments

10. Applicant's arguments, see Reply to Office Action, filed 06/04/2007:

With respect to Objection to Claim 2 under 37 C.F.R 1.75, applicant's arguments have been fully considered and are persuasive. The Objection of claim 2 under 37 C.F.R 1.75 has been withdrawn.

With respect to Objection to claims 2-23 and 25 for Informalities, applicant's arguments have been fully considered and are persuasive. The Objection to claims 2-23 and 25 of Informalities has been withdrawn.

With respect to Rejection of claims 11-26 under 35 U.S.C 101, applicant's arguments have been fully considered and are persuasive. The Rejection of claims 11-26 of 35 U.S.C 101 has been withdrawn.

11. Applicant's arguments filed 06/04/2007 have been fully considered but they are not persuasive.

Applicant argues – "Claim 1 requires that a cluster comprise at least first and second switch devices. Claim 26 also recites this. Such features are neither shown nor suggested by Baskey, which does not make any reference to a network switch."

A. Baskey teaches a cluster of routers, and at the time of the invention, it was well known in the art that a router can perform the functions of a switch.

Applicant argues – “Claim 8 requires that a cluster comprise at least first and second switch devices, one or more active routers, and one or more standby routers. Claim 11 also recites first and second switch devices, and claim 26, (it is assumed that this should be claim 24, rather than claim 26), recites at least first and second switch devices, one or more active routers, and one or more standby routers. Such features are neither shown nor suggested by HP, which does not make any reference to a cluster, network switch, or router whatsoever.”

B. HP teaches network nodes, a network node is defined as any of computer systems, routers, switches and hubs, as known by one well skilled in the art at the time of the invention. HP teaches these network nodes as being defined within the topology maps. The submaps as shown in HP allow viewing and commands to be run on the network nodes within the submaps as detailed.

Applicant argues – “Claims 1 and 26 both recite first and second switch devices, a plurality of active routers, and one or more standby routers. Such features are neither shown nor suggested by Mittal, which does not make any reference to network switches, and uses the terms router and also cluster in an entirely different context than Applicant.”

C. Mittal teaches a cluster of routers, and at the time of the invention, it was well known in the art that a router can perform the functions of a switch.

Applicant argues – “Additionally, (referring to Claims 1 and 26), the routers shown in Mittal are not described as being grouped, designated, or in any way categorized as being separated into active and standby, again as claimed. Thus, the routers of Mittal fail to have a key characteristic explicitly recited in claims 1-7 and 26.”

D. Mittal teaches a cluster of routers, and at the time of the invention, it was well known in the art that a router can perform the functions of a switch. Additionally, it is inherent that a router that is not used within the cluster is in standby for a router that is ‘active’. Each active router can be ‘standby’ for each of the other active routers, making it inactive for the workload of the active router it would replace should that active router fail.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Goodchild whose telephone number is (571) 270-1589. The examiner can normally be reached on Monday - Friday / 9:00 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571) 272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WJG
07/11/2007


JASON CARDONE
SUPERVISORY PATENT EXAMINER